Two positions of RED in Chinese adjectival compound formation

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Background

Reduplication and degree words like hen 'very' have a similar effect ongradable adjectives in Mandarin Chinese:

Bare Adj  Adding degree words/reduplication

<table>
<thead>
<tr>
<th></th>
<th>Directly attributable</th>
<th>Directly predicative</th>
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</thead>
<tbody>
<tr>
<td>(1a)</td>
<td>a. gan.jing (de)</td>
<td>chenyi</td>
</tr>
<tr>
<td></td>
<td>clean SUB shirt</td>
<td>clean</td>
</tr>
<tr>
<td></td>
<td>'the clean shirt'</td>
<td>'The shirt is clean.'</td>
</tr>
<tr>
<td>(2a)</td>
<td>a. (gan.jing/jing/hen gan.jing) * (de) chenyi clean-clean</td>
<td>/very clean SUB shirt</td>
</tr>
<tr>
<td></td>
<td>'the clean_{very}/(very) clean' shirt</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. chenyi [gan.jing/jing/hen gan.jing]</td>
<td>clean-clean /very clean</td>
</tr>
<tr>
<td></td>
<td>'The shirt is [clean_{very}/(very) clean]'</td>
<td></td>
</tr>
</tbody>
</table>

Reduplication seems to be in complementary distribution with degree words

(3) chenyi (*hen) gan.gan.jing/jing

Previous Claims (Zhang 2015)

- Both the reduplication morpheme (RED) and degree words like hen head the functional projection (DegP) above AP;
- Only functional projections like DegP have the [+V] feature, which makes them directly predicative (following Grano 2012).

RED does not instantiate the same functional head as hen

[1] Reduplication and degree words can co-occur; the order matters:
(4) zheii chan jenyi hen gan.jing/hen gan.jing

this CL shirt very clean

'This shirt is very very clean'

[2] For a class of ‘orphan’ reduplicated adjectives which do not have a base form (Liu 2013; Paul 2015):
(5) a. da.da.lie.lie 'careless

a. po.po.ma.ma 'fussy

b. zheii ge nh'ai da.da.lie.lie

careless SUB girl |

this CL girl careless

'the careless_{RED} girl'

The girl is careless_{RED}'

RED must not occupy the DegP position for them:
(6) a. zheii ge nh'ai hen da.da.lie.lie

this CL girl very careless

'This girl is (very) careless_{RED}.'

b. zheii ge nh'ai bi Mai.geng da.da.lie.lie

this CL girl than Mary more careless

'This girl is more careless_{RED} than List.'

[3] Reduplication is possible after the addition of hen
(7) hen gan.jing/hen gan.jing 'very very clean'

Emp[P+V]

Red[P+V]

Deg[P+V]

apo

\sqrt{GAN \ V/JING}

Summary

- RED is indeed a functional head with [+V] feature (2; 6)
- RED is not in complementary distribution with DegP (3; 4; 7)

Proposal: Two positions of RED

(i) RED as the adjectival categorizer a° (with [+V] feature) which takes a root compound (within the framework of Distributed Morphology, Marantz 1997, a.o.)

(ii) RED as the head of a functional projection which is structurally higher than DegP, which we identify as the ‘Emphatic Phrase’ (EmpP)

Assumptions. Following Lee-Kim (2016), the reduplication pattern is sensitive to the structure of its base.

When the base is a coordinate phrase AB, the resulting form is ABB;

When the base is a subordinate phrase AB, the resulting form is ABAB.

Derivations.

[1] ‘Orphan’ reduplicated adjectives are directly predicative ([+V]), but can co-occur with hen (RED as the adjectival categorizer a°)

(8) da.da.lie.lie 'careless'

Emp[P+V]

Deg[P+V]

apo

\sqrt{DA \ V/LIE}

RED[P+V]

\sqrt{DA \ V/LIE}

[2] ‘Non-orphan’ reduplicated adjectives are directly predicative (10b), though its base is not directly predicative (10a):

(10a) a. gan.jing/jing 'clean' (no [+V])

Emp[P+V]

b. ‘gan.gan.jing/jing/jing ‘clean-clean’

Emp[P+V]

Emp[P+V]

apo

\sqrt{GAN \ V/JING}

\sqrt{DA \ V/LIE}

RED[P+V]

\sqrt{DA \ V/LIE}

[3] Reduplication is possible after the addition of hen
(11) hen gan.jing/hen gan.jing 'very very clean'

Emp[P+V]

Red[P+V]

Deg[P+V]

apo

\sqrt{GAN \ V/JING}

Extensions

[1] Since two REDs head different projections, they can co-occur in principle—the prediction is borne out:

(13) (?)hen dada.lie.lie hen dada.lie.lie 'very very careless'

Emp[P+V]

Emp[P+V]

Deg[P+V]

apo

\sqrt{DA \ V/LIE}

RED[P+V]

\sqrt{DA \ V/LIE}

[2] Though reduplication can be used either as an adjectival categorizer or as an Emp head, (14) is still banned because of the syntactic OCP (Hiraiwa 2010):

(14) *da.da.lie.lie da.da.lie.lie 'careless-careless'

Emp[P+V]

Emp[P+V]

apo

\sqrt{GAN \ V/JING}

\sqrt{DA \ V/LIE}

\sqrt{DA \ V/LIE}

Conclusions

- Two uses of RED: reduplication morpheme as an adjectival categorizer or as the head of an Emphatic Phrase
- The Emphatic Phrase as an additional functional projection to DegP in the extended projection of adjectives captures the intuition about reduplicated adjectives in Liu (2013), according to which they denote a ‘life-like’ state and the positive degree conveyed is ‘the byproduct of state realization’.

Selected References.